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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,238	04/12/2005	Yasuyuki Tomiyama	259619US0PCT	9016
22850	7590	05/30/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER STULII, VERA	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 05/30/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/510,238	<b>Applicant(s)</b> TOMIYAMA ET AL.	
	<b>Examiner</b> VERA STULII	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/09/08, 09/29/05, 10/14/04</u> .                            | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morey (US 5,316,779) in view of Cho et al (US 4,105,802) and applicant's admission of the prior art.**

In regard to claim 1, Morey discloses aspartame as an artificial sweetener for the carbonated soft drinks (Col. 1 lines 11-26). Morey further discloses that "of many carbonated beverages those containing the artificial sweetener aspartame produce the most foaming and most persistent foam (Col. 1 lines 22-25). Morey discloses that excessive foaming of aspartame containing beverages becomes a serious problem when aspartame containing beverages are served in disposable cups. Morey also discloses that "antifoaming agent accelerates the rate of collapse of the foam head produced when the beverage is poured" (Col. 2 lines 20-21). Morey further discloses application of the anti-foaming agent to the inner surface of a disposable cup (Col. 2 line 17-20). Therefore Morey discloses the same problem (excessive foam formation when aspartame is used in the soft carbonated beverages) and solution (use of food-grade anti-foaming agent) as applicants do.

Morey does not specifically disclose HLB of the anti-foaming agents. Also, although Morey applies the anti-foaming agent to the cup, it does become part of the beverage when the beverage is added to the cup.

Cho et al (US 4,105,802) disclose a process for producing soft carbonated beverages (carbonated coffee drinks) (Abstract). Cho et al disclose that naturally produced coffee extract causes excessive foam formation that leads to a "large quantity overflow" during pouring into the container or opening the container. Cho et al also

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disclose adding organic additives to the extracted coffee liquid in order to reduce foaming while maintaining its body, taste and flavor. Cho et al also teaches further carbonation of the beverage. Cho et al disclose “glycerin fatty acids esters” as additives (Col 2 line 61; Col. 3 lines 15, 23, 32). Cho further discloses that “the carbonated drink is then charged into a container such as a can or bottle by the conventional method so as to be suitable for the individual consumption. Cho disclose adding glycerin fatty acids ester to the coffee extract (Col. 2 line 15). Applicant’s admission of the prior art further evidences the fact that the recited emulsifiers are conventional. In summary, both Morey and Cho disclose:

- the carbonated beverage containing sweeteners;
- problem of excess foam formation;
- use of additives that reduce foam formation (anti-foaming agents).

Morey specifically discloses the problem of foam formation in beverages with aspartame. Cho et al disclose glycerin fatty acids esters as antifoaming agents.

Therefore, one of ordinary skill in the art would have been motivated to modify Morey in view of Cho et al and to employ conventional glycerin fatty acids ester as an anti-foaming agents in the beverages containing aspartame for the benefits as taught by both Morey and Cho et al. The particular conventional glycerin fatty acid ester selected to suppress the foam formation in carbonated soft beverages is seen to have been an obvious result effective variable, routinely determinable. In regard to claim 3, as noted above, applicant’s admission of the prior art discloses that the recited compounds were well known emulsifiers. Therefore to substitute one conventional emulsifier/antifoaming

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agent with another conventional emulsifier/antifoaming agent for its art recognized and applicant's intended function, would have been obvious.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERA STULII whose telephone number is (571)272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steve Weinstein/  
Primary Examiner, Art Unit 1794

VS